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AN INVESTIGATION OF CONSISTENT RATES ACROSS SWISS HOTELS' DIRECT CHANNELS

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This study investigates a growing issue for hotels and consumers: pricing across distribution channels. Research suggests that hotels should drive consumers towards direct channels with lower operating costs and away from intermediaries, yet few studies have investigated pricing practices across the direct communication channels that hotels control. The results of two surveys of over 100 Swiss hotels illustrate pricing inconsistencies in low- and high-season periods across four communication media under the properties' direct control: telephone, email, static website price lists, and reservation request forms on the website. About one out of two hotels offered different rates across these media, despite the requests being on the same date, for the same type room for the same period. Prices via email responses were the lowest in the low-season survey and website prices were lowest in the high-season survey. Across both surveys, prices were lower via online media—email, static website price lists, and reservation request forms—than via the telephone. Hotel category and number of stars showed a positive relationship with consistent pricing in the low season, and a negative relationship in the high season. Finally, price variations of over 200%—for the same room at the same date—across a hotel's direct online and offline channels serve as a wake-up call for hoteliers to review their pricing and procedures for communicating this pricing.

Key words: Pricing; Distribution channels; Swiss hospitality industry; Price dispersion

Introduction

Anticipated over a decade ago (Emmer, Tauck, Wilkinson, & Moore, 1993), electronic distribution in the hospitality industry has arrived, along with myriad questions on how this evolving distribution will affect operators and consumers (Caroll & Siguaw, 2003; O'Connor, 2003; O'Connor & Frew, 2002; O'Connor & Piccoli, 2003; Thompson & Failmezger, 2005). Hoteliers that successfully adopt electronic distribution should add value, develop their brand, and build customer loyalty; those that fail may lose their customer base to intermediaries (Sigala & Buhalis, 2002).

The Internet is a double-edged sword for hoteliers. The market continues to grow, with online purchasing expanding from business and leisure travelers to include corporate travel (Caroll &

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Siguaw, 2003). Furthermore, wired consumers are affluent and frequent travelers (O'Connor, 2003). An Australian study found that online travelers spent twice as much as their offline counterparts (Bolin, 2002).

Yet perceptions of better prices online have consumers shopping for last-minute hotel bargains via web-based intermediaries and hotel websites (Enz, 2003; O'Connor & Frew, 2002; O'Connor & Piccoli, 2003; Thompson & Failmezger, 2005; Varini, Engelmann, Claessen, & Schleusener, 2003). Repeatedly offloading unsold rooms via these online channels creates a dangerous precedent as customers quickly learn to wait for better deals. For hotels offering last-minute pricing, "the demand boost will not be large, but the loss of revenue will be painful" (Enz, 2003, p. 5).

In addition to demand-based pricing (Hanks, Cross, & Noland, 2002; Toh & Dekay, 2002), management can draw upon technology in order to limit pricing products as commodities. Businesses can segment markets and price based on customer's purchasing behavior and website navigation patterns (Ancarani, 2002; Iyer, Miyazaki, Grewal, & Giordano, 2002; Sotgiu & Ancarani, 2004; Yelkur & DaCosta, 2001). A less savory type of Internet pricing charges informed consumers less and uniformed consumers more (Bayliss & Perloff, 2002). Although Deck and Wilson (2002) argue that tracking customers' website navigation patterns can lead to price-matching strategies that blunt online competition, pricing based on customer profiles raise another concern: unfair pricing.

In a widely publicized example early this century, Amazon charged customers different prices for the same product (Deck & Wilson, 2002). In a *New York Times* opinion piece on this incident, the distinguished economist Paul Krugman (2000) argued the dynamic pricing is undeniably unfair and possibly illegal when people pay more because of who they are. Legalities aside, perceived price unfairness has negative consequences for hotels and is an important topic (Kimes, 2002; Rohlfs & Kimes, 2005; Wirtz, Kimes, Theng, & Patterson, 2003; Xia, Monroe, & Cox, 2004).

At least three studies showing varying hotel prices, usually for the same room at the same time, illustrate this possible perceived price unfairness (O'Connor, 2003; Thompson & Failmezger, 2005; Tso & Law, 2005). In a prescient prediction of online travel, Thompson and Failmezger (2005) posited that these price differences would "spur the emergence of travel search engines (i.e., meta-search engines) that can find the best room rate across all channels" (p. 14). In their July issue, *Laptop Magazine* (Potter, 2005) labeled the meta-travel search engine, Kayak.com, as an Editor's Choice and five-star travel super searcher.

A limitation of these meta-search engines is gathering prices via hotel direct channels such as calling or emailing the hotel, or viewing static prices on the hotel's website. Furthermore, compared to calling the hotel, many online channels—particularly the intermediaries—may mislead consumers on room availability (Thompson & Failmezger, 2005). The prevailing online channel suggestion, however, is to drive customers to the hotel's own website rather than to an intermediary's website (O'Connor & Piccoli, 2003; Thompson & Failmezger, 2005). Yet what happens when consumers land on the hotel's website, call the hotel, or email the hotel?

While previous studies explored hotel pricing practices across direct and indirect channels (Lehman, 2003; O'Connor, 2003; Thompson & Failmezger, 2005; Tso & Law, 2005), this study adds a theoretical perspective to investigate three research questions based on hotel direct channels. Do hotels maintain consistent pricing across the communication channels they control? Do hotels vary in their use of consistent pricing in the high and low seasons? Finally, does diffusion of innovations help explain hotel pricing practices across the direct communication channels they control?

Literature Review

Online Pricing

Consumers began using the Internet to seek information and entertainment; today the Internet is also a convenient way to shop (Koch & Cebula, 2002; Kung, Monroe, & Cox, 2002; Vulkan, 2003). Since the dawn of electronic commerce, academics and the media predicted that competition among Internet retailers would approach the theoretical economic model of perfect competition. Easily comparing web-based information on prices, features, and quality increases cost transparency

(Sinha, 2000). This transparency can force prices down, such as for burial caskets and life insurance (Clay, Krishnan, & Wolff, 2001; Levitt & Dubner, 2005; Vulkan, 2003).

The Internet also reduces search costs relative to visiting physical stores; shopbots and comparison sites lower search costs even further (Chevalier & Goolsbee, 2003). Reducing search costs should intensify price competition and increase searching for better prices (Jiang, 2002). Paradoxically, the growing number of web pages—the popular search engine Google indexed over 8 billion pages in June 2005—makes finding a better price increasingly tedious. As the economics of information theory argues, buyers "acquire information till the point where the marginal cost of acquiring additional information equals or exceeds the marginal benefit" (Biswas, 2004, p. 725).

Online consumers may give up searching, opting to save time rather than save money (Clay et al., 2001; Koch & Cebula, 2002; Suri, Long, & Monroe, 2004; Varini et al., 2003; Yelkur & DaCosta, 2001). The previously mentioned metasearch engine Kayak.com, however, expands and simplifies the search process, saving consumers time by searching hundreds of sites simultaneously.

Increased access to online information supports that consumers may find greater price dispersion in online markets than in offline markets (Ancarani & Shankar, 2004; Pan, Ratchford, & Shankar, 2003). Studies of books and airline tickets showed online price differences ranging from 18% to 59% (Clay et al., 2001; Koch & Cebula, 2002). The greater the perceived price dispersion, the more likely that consumers will search for better prices (Biswas, 2004). The consensus among researchers—price dispersion among Internet retailers is large and online prices are modestly lower or actually higher compared to offline prices—contradicts the notion that the Internet has eliminated consumer search costs (Chevalier & Goolsbee, 2003).

Prices may be higher online due to factors such as auctions, price discrimination, shipping charges, and branding (Ancarani & Shankar, 2004; Koch & Cebula, 2002; Kung et al., 2002; Vulkan, 2003). Consumers shopping in an interactive environment favor a familiar brand over an unfamiliar one due to the known brand's implicit guarantee (Alba et al., 1997; Biswas, 2004). Online and offline, brands decrease price elasticity and increase the seller's power (Kung et al., 2002; Oh, 2003; Vulkan, 2003).

Conflicting results aside, cost transparency on the Internet can impair the seller's ability to obtain high margins, even for name brands, and turns goods and services into commodities (Sinha, 2000). Thus, it becomes increasingly difficult for some companies to earn a profit (Birch & Young, 1997). This negative outcome supports arguments that hoteliers should heed the trend of lower prices online and carefully monitor their prices across online and offline distribution channels (Enz, 2003; O'Connor & Piccoli, 2003; Thompson & Failmezger, 2005).

Traditional Hotel Industry Pricing

The intangible nature of service and the perishable nature of hotel rooms complicate pricing decisions, such as differential pricing based on costs, locations, customer segments, and market willingness to pay (Yelkur & DaCosta, 2001). Firms, however, must justify differential pricing to the consumer (Kimes, 2002; Rohlfs & Kimes, 2005; Vulkan, 2003; Xia et al., 2004). One way hotels justify different prices is by adding value such as access to special amenities (e.g., gym or parking) or services, yet evidence from Switzerland suggests that the industry has little knowledge regarding customers' willingness to pay for these amenities (Varini et al., 2003). Added benefits aside, hotel rooms are perishable.

For hotels, as well as other industries with perishable inventories, revenue management is a logical evolution of pricing (Hanks et al., 2002). Revenue management matches prices to current inventory and demand, and then selects the optimal rate for maximizing capacity and revenue (Toh & Dekay, 2002). This variable or demand-based pricing means that guests could pay a different price for each night of their stay. Best-available rate pricing, a guaranteed lowest available rate for each night, helps reduce possible guest confusion over demand-based pricing. Research suggests that for multiple-night stays, customers prefer individual rates for each night rather than an average price per night over the stay (Rohlfs & Kimes, 2005, p. 4).

Most US hotels, particularly mid-market hotels and less so low-market hotels, practice revenue management through dynamic pricing based on occupancy levels (Enz & Canina, 2005). But not all hotels adopt this approach. Apart from resorts that charge high- and low-season prices, most Swiss hoteliers—especially small and independent properties—practice few sophisticated techniques, changing their prices just annually (Varini et al., 2003). Compared to lower rated hotels, however, five-star Swiss hotels vary their prices more often based upon supply and demand.

Category aside, hoteliers use several pricing options. In slow times, hotels let customers request prices lower than the quoted price (Hanks et al., 2002; O'Connor, 2003). In busy times, hotels overbook in order to cover last-minute cancellations (Toh & Dekay, 2002). Hotels also borrow from airline practices of advanced purchase discounts and variable refunds through single rates, room type rates, and fenced rates (Hanks et al., 2002). Fenced rates, one of several suggested online pricing options, include prepaid and nonrefundable stays in exchange for a reduced price, or upgrades, amenities, and fewer restrictions in exchange for a higher price (O'Connor & Piccoli, 2003; Rohlfs & Kimes, 2005).

Online Distribution: Changing Rules in the Hospitality Industry

Thanks to the Internet, travel companies such as low-cost carriers Easyjet and Ryan Air apply distribution-based pricing successfully, charge additional fees or different rates based on distribution channels (O'Connor, 2003). The impact of online pricing in the airline industry has led online intermediaries such as Expedia, Orbitz, and Travelocity to expand beyond airline tickets and to hotel rooms (Thompson & Failmezger, 2005). This growing online competition underscores the importance of hotels understanding the distribution costs and distribution shares associated with each channel (O'Connor & Frew, 2002).

Horwath's Worldwide Industry Study lists direct contact—telephone, fax, and email—as the predominant hotel distribution channel but this channel dropped from 38% in 1995 to 34% in 2002 (Marvel, 2004). Online, hotels sell rooms via travel agents, their own websites, and new Internet intermediaries. In Western Europe, intermediary sales were 36% of online sales in 2003 (Marcussen, 2004), but intermediaries change the economics of distribution by selling rooms beyond the hotelier's control, dictating prices, and charging fees that erode hotel profits (Caroll & Siguaw, 2003; Enz, 2003; O'Connor & Piccoli, 2003; Sigala & Buhalis, 2002).

The above results, however, differ in a country with few chain hotels and mostly independent operators, such as Switzerland. A survey of over 200 Swiss hotels showed that three out of four bookings came through direct channels: 44% through telephone/fax contacts, 13% through the hotel website, and 17% through e-mail (Schegg & Steiner, 2003). The proportion of direct booking was higher in one- to three-star hotels (75–80%) than in four- to five-star hotels (67%). Online intermediaries had only a small market share (4%) in these Swiss hotels.

Understandably, some hotels dislike net-based travel intermediaries (Marvel, 2004). Hotel chains such as Cendant, Hilton, Marriott, and Starwood now guarantee the lowest online rate in order to woo customers away from online intermediaries and to their site (Rohlfs & Kimes, 2005). Four Seasons has dropped online intermediaries and has no bookings via third-party websites (Marvel, 2004). Research suggests that this trend will continue and the share of the third-party websites sites should drop from 50% in 2002 to 45% by 2005 (PhocusWright and Bear Stearns reports, cited in Marvel, 2004).

Hotels should direct reservations to channels with lower operating costs—their own websites (O'Connor & Piccoli, 2003). In addition to paying no commissions on their website sales, hotels can adjust the inventory instantaneously, adapting room prices to the supply and demand (O'Connor, 2003). Given the right technology, hotels could also adjust prices based on customer purchasing behavior and website navigation (Ancarani, 2002; Iyer et al., 2002; Sotgiu & Ancarani, 2004).

Across channels, two suggested pricing strategies for hotels are maintaining consistent prices and varying the price according to the channel—low prices in low-cost channels and high prices in high-cost channels (O'Connor & Piccoli, 2003). A

later study argues for consistent rates across all channels, especially the hotel's direct channels. Consistent pricing saves consumers time searching for better rates as well as assuring consumers of the best rate (Thompson & Failmezger, 2005).

Perceived Pricing Fairness

In essence, hoteliers have a smorgasbord of pricing options. Ample literature supports pricing based on customers' past behavior or based on the hotel's supply and demand. Despite the underlying rationale for this dynamic pricing, inconsistent prices can raise consumer perceptions of unfair pricing and lead to confused customers questioning and complaining about prices that seem unfair (Cox & Dale, 2001; Kimes, 2002; Vulkan, 2003; Yelkur & DaCosta, 2001). These perceptions can cause customers to defect, spread negative information, and instigate other actions that damage the seller (Bolton, Warlop, & Alba, 2003; Wirtz et al., 2003; Xia et al., 2004).

The results of 10 experiments on price fairness suggest that consumer knowledge of prices contributes to perceived unfairness (Xia et al., 2004) and "from a consumer's perspective, price differences appear fair(est) only if they can be attributed to quality differences" (Bolton et al., 2003, p. 488). Yet it is hard to argue quality differences for the same hotel room for the same date and booked at the same time.

Furthermore, as the degree of transaction similarity may relate to perceptions of price unfairness (Xia et al., 2004), guests may question if whether they contact the hotel by telephone or by email will influence the room price. Consistent rates across channels, however, let consumers spend less time searching and "confidently book the hotel via any channel, while still being assured of the best rates" (Thompson & Failmezger, 2005, p. 15). In addition to confused customers and price fairness issues, the greater the perceived price dispersion the more likely consumers should search for a better price (Biswas, 2004; Thompson & Failmezger, 2005).

Studies of Hotels' Online Pricing

The previous sections noted arguments for pricing based on customer demand, user profiles, user website navigation, and price fences. The literature review also included arguments that customers dislike price unfairness, and suggested price consistency across all channels, particularly the direct channels that the hotel controls. Five hospitality industry studies shed light on these arguments and support further investigation of price consistency.

In an early study, Yelkur and DaCosta (2001) investigated online pricing by 20 major hotel firms present in Chicago. They argued that the Internet facilitated differential pricing in order to target profitable consumer segments based on four factors: demographics, socioeconomic, trip purpose, and customer loyalty. They found that hotel groups such as Marriott (Marriott Renaissance and Courtyard) and Bass (Holiday Inn and Crowne Plaza) adopted a common pricing practice across their properties and that US companies tended to offer more differential pricing based on market segments than non-US companies.

In perhaps the first study of pricing across channels, O'Connor (2003) investigated pricing by 45 leading brands via the hotel website, hotel central reservation system, and third-party websites (intermediaries). He found that one out of three brands offered consistent pricing across the three channels. Economy and mid-price hotels offered lower prices via their websites compared to prices from the central reservation service or third-party websites. With up-market brands, however, rates were more likely to be higher on the hotel website compared to the other two channels.

Given travel agents' strong role in hotel distribution, Lehman (2003) compared agency catalogue and online prices for vacation packages to three Red Sea resorts. The results failed to support lower Internet prices and price dispersion and suggested a negative relationship with resort category. Compared to offline prices, the two lower category resorts tended to have higher online prices and price dispersion, while the luxury resort tended to have lower online prices and price dispersion.

Tso and Law (2005) compared online pricing by 45 Hong Kong hotels across seven channels: Expedia, Travelocity, TravelWeb, Hotels.com, Wing OnTravel.com (a local agency), the hotel website, and voice. The findings, collected over five consecutive months, revealed significant differences

among the seven channels for the one- to five-star hotels; indirect distribution channels had lower online prices than the hotel's direct channels of the website and telephone receptionists. Across the seven channels, the hotel's website was the most expensive channel for the three-star category, the second most expensive for four-star hotels, and the third most expensive for the five-star category. For all hotel categories, the local travel agency offered lower room rates than the six other channels.

Finally, Thompson and Failmezger (2005) compared rates and availability across five channels—telephone, Expedia, Orbitz, Travelocity, and the hotel's website—by over 100 US hotels. On average across four market segments—luxury, upscale, mid-market, and budget—Travelocity, followed by the hotel website, had the lowest booking cost. Calling the hotel yielded the highest prices and the most variance. In the luxury market, calling the hotel resulted in the lowest cost but the hotel website yielded the lowest cost with budget and mid-market properties. Similar to other studies, they found wide discrepancies in rates and suggested that consumers shop around. Travelocity usually offered the best prices, but the authors estimated that comparison shopping would save consumers more than 5%.

The five studies illustrate varying online and offline pricing practices, but differ on the relationship between category and pricing practices. Furthermore, the studies fail to focus on the channel recommended by two studies (O'Connor & Piccoli, 2003; Thompson & Failmezger, 2005): hotel websites. When guests arrive at the hotel's website, will static prices on the website differ from prices gathered via other communication media that the hotel controls—calling or emailing the hotel? This study follows up and extends previous studies by introducing a theoretic approach, exploring other independent variables related to pricing, and examining prices in the high and low seasons.

Conceptual Development

Diffusion of innovations argues that organizations vary in how they assimilate new technologies, such as the Internet, into their business. Research suggests that organizations adopt innovations over time (Rogers, 1995), from trialing the innovation, to gaps in assimilating the innovation (Fichman, 2000; Fichman & Kemerer, 1999), and finally to using the innovation well (Cooper & Zmud, 1990; Zmud & Apple, 1992). E-Business adoption includes adding web-based processes (Dinlersoz & Hernández-Murillo, 2005) or features (Murphy, Olaru, Schegg, & Frey, 2003), and evolving website strategies (Dholakia & Kshetri, 2004; Doolin, Burgess, & Cooper, 2002; Teo & Pian, 2003).

For example, some organizations "failed to establish procedures that move them to successful implementation of the most basic Internet tool, email" (Murphy & Tan, 2003, p. 548). Electronic distribution, especially the growth of web-based travel intermediaries, has added further complexity and dynamics in managing hotel distribution systems. Just as organizations fail to establish procedures for using email technology, hotels that adopt the Internet may fail to establish procedures for pricing their rooms across distribution channels.

Hotels that implement Internet technologies well should, all things being equal, aim towards consistent pricing across the direct communication channels that they control: email, telephone, and static price lists on websites. Consistent pricing for the same room on the same date and requested at the same time would minimize perceived price unfairness, price dispersion, and consumers seeking a better price. Yet research has shown that hotels charge myriad prices for the same room at the same time.

Diffusion research has shown that organizational characteristics—size and category—relate positively to hotels having (Schegg, Steiner, Frey, & Murphy, 2002; Siguaw, Enz, & Namiasivayam, 2000; Wei, Ruys, van Hoof, & Combrink, 2001) and implementing (Gherissi-Labben, Schegg, & Murphy, 2003; Murphy, Olaru et al., 2003; Schegg, Murphy, & Leuenberger, 2003) Internet technologies. Larger and higher rated hotels have better financial and personnel resources to manage booking inquiries across multiple communication channels. Investigating these early adopters should shed light on pricing across direct communication channels. Thus:

Research Question 1: Does hotel size relate to consistent pricing for the same type room on the same date and requested at the same time?

Research Question 2: Does hotel category relate to consistent pricing for the same type room on the same date and requested at the same time?

One measure of when an organization adopts the Internet is the age of that organization's domain name. These names, the suffix in a hotel's email address and website address, usually include the hotel's name. For Australian businesses (Nguyen, Murphy, & Olaru, 2003) and the world's top brands (Murphy, Raffa, & Mizerski, 2003), organizational size relates positively to having a branded domain name, such as hyatt.com or hilton.com. Tourism studies suggest that having these branded electronic addresses relates to a later step of organizational Internet adoption—quality email replies (Murphy, Olaru et al., 2003; Murphy & Tan, 2003).

As noted earlier, organizations evolve in their implementation of new technologies. Research has used domain name age as a temporal measure of Internet adoption. The earlier an organization registers its domain name, the more successful the organization's implementation of its website (Gosain & Faraj, 2001). Thus:

Research Question 3: Does the domain name age of a hotel relate to consistent pricing for the same type room on the same date and requested at the same time?

Research has shown that hotel size and category relate positively to the adoption and implementation of technology. Furthermore, domain name reflects a temporal measure of Internet adoption. Exploring how hotels that tend to lead in the adoption of Internet technologies, larger and higher rated hotels, as well as hotels that led in the adoption of domain names, should shed light on pricing practices of the early adopters.

Methodology

This study extends three previous studies (O'Connor, 2003; Thompson & Failmezger, 2005; Tso & Law, 2005) by focusing on four communication media under the hotel's direct control: email, web-based request forms, static price lists on hotel websites, and calling the hotel. Given the conflicting results in pricing based on hotel category (Lehman, 2003; O'Connor, 2003), the study also compares pricing across hotel categories in both high and low seasons.

Sampling for this study stemmed from the 1558 Swiss Hotel Association (SHA) hotels with a website. The SHA includes nearly all mid- to high-class hotels, underrepresents the budget sector, and accounts for nearly 80% of all hotel overnight stays in Switzerland (www.hotelleriesuisse.ch, accessed October 12, 2005). As higher rated hotels registered domain names earlier than did lower rated hotels (Scaglione, Schegg, Steiner, & Murphy, 2004a), the proportion of four- to five-star hotels was higher in this subpopulation. A random process, stratified across hotel category, selected 130 hotels with a website (13% zero to two-star hotels, 37% three-star hotels, and 48% four- to five-star hotels). The study gathered the domain name age for each hotel from the Swiss domain name database (www.switch.ch).

The first survey gathered prices from three communication media that the hotel controls: telephone, email, and online price lists. The survey asked for just one room night during a slow period for Swiss hotels. To increase the validity of the findings and to reduce overgeneralizing the results (Babbie, 1997), a second survey replicated the study during the busy season and for 1 week rather than for 1 day. The procedure was the same, except for including a fourth channel: reservation request forms on the website. Similar to email, the online forms send an electronic request to the hotel, which hotel employees then answer via email. Adding this fourth channel helped further explore how hotels implement the Internet with regard to room prices.

To ensure a high response rate, both survey requests included a nearby alternative date in case the hotel was booked for the primary date. To reduce possible influence from multiple requests for the same dates, both surveys varied the information requests—email, telephone, and online form in the second survey—so that no one channel was always first or last. To reduce possible bias due to different room types, all information requests asked for a simple, standard room.

Results

The results showed varying use of direct communication channels for pricing. All 130 hotels had an email address and telephone number on their website. Over 9 out of 10 hotels (92%) listed a price on their site and about two out of three hotels (65%) offered a web form letting customers request information. Although not a focus of this study due to a low presence in a past Swiss study (Schegg et al., 2002), one in eight hotels (12%) offered real-time bookings to let customers reserve a room directly over the web. Just one hotel listed a special Internet price on the website, but this study used the basic rate on the website rather than the Internet special.

Filtering out hotels closed during the booking time or those that failed to reply yielded 121 hotels with telephone and email rates and 111 hotels with rates across three media: telephone, email, and prices on the website. The second survey, which added room rates through web request forms, allowed comparing 71 hotels on four media and 111 hotels across the first three channels. As this study investigated price consistency, the analysis compared prices for the same hotel and for the same date.

To validate the assumption that larger and higher rated hotels lead in the adoption of Internet technology, two statistical tests correlated domain name age with the number of rooms and category; both correlation tests confirmed the assumption. There were significant ($p < 0.001$) and positive correlations with domain name age and both hotel size (Pearson's correlation = 0.441) and hotel category (Spearman's rho = 0.475).

Extreme Price Differences

In order to highlight price unfairness, Figure 1 shows the most egregious price differences found in this study. In the first case, a customer that sought a basic room received a price of 39 Swiss Francs (CHF) via email and a price of 80 CHF via the telephone—a difference of 205% for the same date. Alternatively, in the second case a customer would have seen a price of 98 CHF via email and heard 48 CHF on the phone. Although the differences were less extreme in the other four cases, customers could still receive quotes—for the same basic room at the same date—of almost double the price depending on the direct channel used.

Average Channel Prices

The next two analyses, *average channel prices* and *matched prices by channel*, explored if any channel tended to be more or less expensive. Figure 2 shows the average high- and low-season prices per channel. In both surveys, hotels offered lower prices via online channels—websites and email—and calling the hotel gave the most expensive average price.

The results of a paired sample *t*-test showed that telephone prices in the first survey, the low season, were significantly higher than prices via email [$t(110) = 2.964$, $p = 0.004$] and on the website [$t(110) = 2.367$, $p = 0.02$]. Similar to the first study, the paired sample *t*-test showed that calling the hotel yielded prices significantly higher than hotel website prices [$t(110) = 2.317$, $p = 0.022$]. Differences between telephone and email prices in the second survey were insignificant, suggesting less price variance across channels during the high season.

A final analysis examined the 71 hotels in the second survey with prices for all four channels. Again, the highest average rate across all channels was the telephone (175.4 CHF). Responses to reservation request forms (167.9 CHF) were the next most expensive, followed by website prices (169.0 CHF) and then by prices via email (166.9 CHF). The results of paired sample *t*-tests showed that telephone prices were significantly higher than rates from email [$t(70) = 2.2326$, $p = 0.023$], the website [$t(70) = 2.139$, $p = 0.036$], and reservation request forms [$t(70) = 2.049$, $p = 0.044$].

Matched Prices by Channel

The wide range of prices between one-star and five-star hotels may have influenced the results using average prices. Given this possible bias, a nonparametric sign test (Kenkel, 1995) also examined the price differences. This test analyzes matched pairs, ranking a channel's price as higher, lower, or equal to another channel. In each matched data pair if A > B, a "+" is assigned to the pair; if A < B, a "–" is assigned to the pair, and if A = B, the pair is eliminated from the sample and the sample size decreases accordingly.

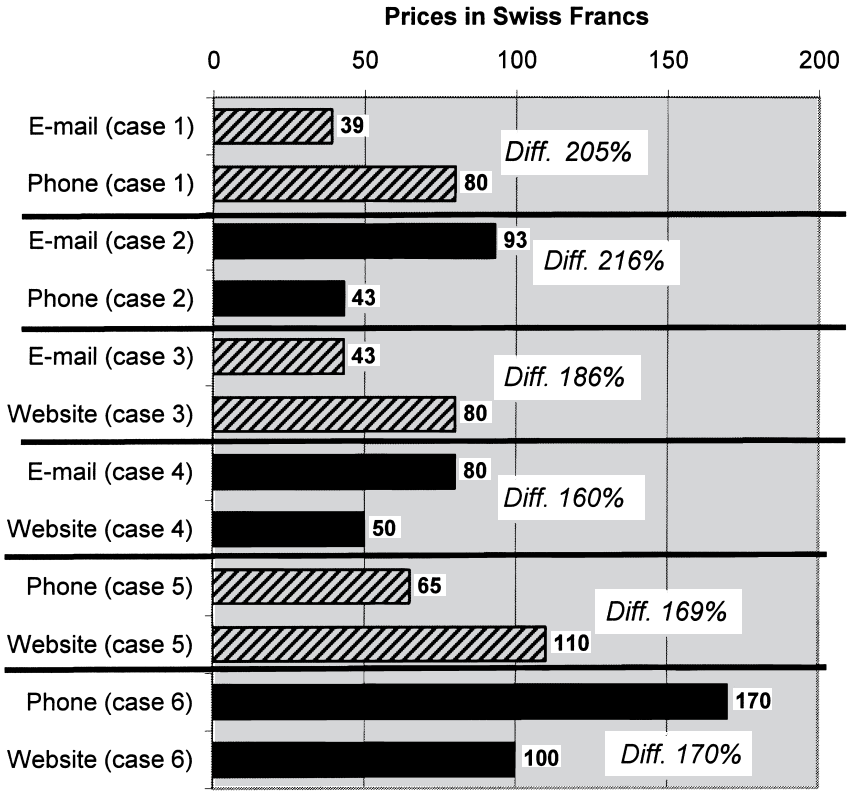

Figure 1. Extreme price differences between channels.

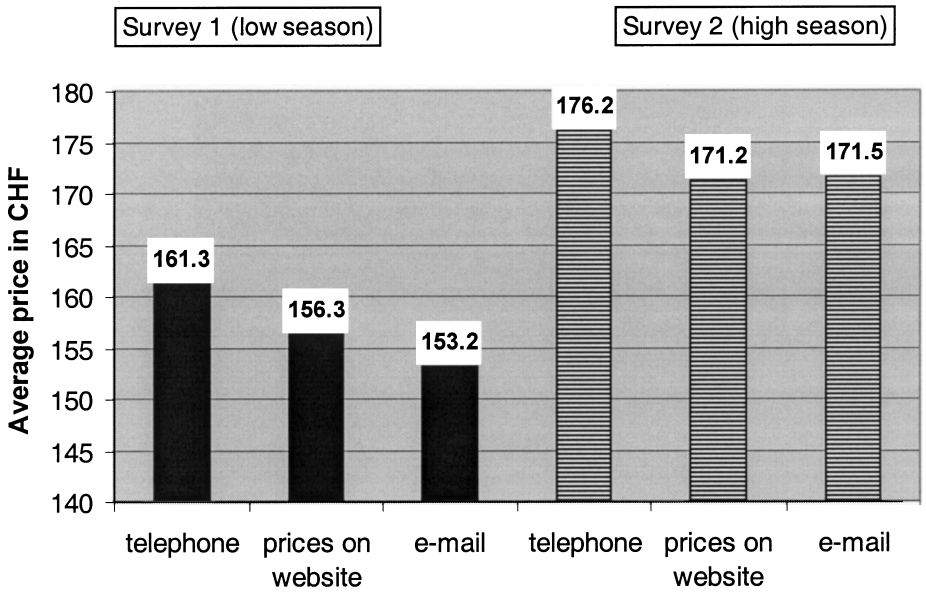

Figure 2. Average prices across three channels ($n = 111$).

Table 1, the results of the nonparametric sign test, shows how often prices were equal, less, or more as well as the z score and significance level (two-tailed test). Telephone prices in both surveys were more expensive than online prices, significantly so compared to email prices in the first survey and website prices in the second survey. There were no significant differences in prices among the Internet channels in either season.

Consistent Pricing

The two previous analyses—average channel prices and matched prices by channel—confirm that the hotels in this study tended to quote the highest price on the telephone. Yet the analyses shed few insights on offering the same price across channels. Consistent prices across all channels assure consumers of the best rate and save them time searching for better rates (Thompson & Failmezger, 2005).

The proportion of hotels with equal rates across three channels—telephone, email, and prices list on the websites—was marginally higher in the first survey (41%) than in the second survey (37%). Across both surveys, hotels with consistent pricing (39%) was higher than in O'Connor's (2003) study of 45 major hotel brands (33%). This comparison, however, fails to account for O'Connor (2003) investigating more channels and the current study covering two seasons. Finally, about six out of seven (86%) hotels gave identical prices via web forms and email, possibly explained by the same employee answering email and web form requests.

Table 1
Matched Prices Across Channels

Channel Pair	Equal	Less	More	z Score	p
Survey 1 (low season)					
Tel/email	67	19	35	2.18	**0.02**
Tel/web	57	20	34	1.91	0.06
Email/web	59	28	24	–0.55	0.58
Survey 2 (high season)					
Tel/email	69	20	32	1.66	0.10
Tel/web	60	14	37	3.22	**<0.01**
Tel/web form	43	14	21	1.18	0.24
Email/web	48	36	27	1.13	0.26
Email/web form	66	8	4	–1.15	0.25
Web/web form	41	26	15	–1.72	0.09

To test the research questions, a series of bivariate correlations examined relationships between price consistency and three hotel characteristics: number of rooms, number of stars, and domain name age. Price consistency, operationalized as the number of times prices disagreed across channels, ranged from zero if the price via email, the website, and telephone was the same to a maximum of three if all three prices differed. As not every website had a web-based form, the results in Table 2 compare the three channels used in both surveys.

In general, the results support significant relationships with price consistency and the three independent variables found in previous diffusion studies: number of rooms, number of stars, and domain name age. The direction of the relationship, however, varied depending upon the season. During the low season, hotel size and domain name age showed a significant negative correlation with consistent prices. In the high season, however, hotel size and number of stars showed a significant positive correlation with consistent pricing. In essence, those hotels (i.e., larger and higher rated properties) that tended to adopt technologies earlier, tended to have more consistent pricing in the low season and less consistent pricing in the high season.

Conclusions and Future Research

Managerial Implications

Ample research, as well as common sense, argues that customers dislike unfair pricing (Bolton et al., 2003; Cox & Dale, 2001; Kimes, 2002; Vulkan, 2003; Wirtz et al., 2003; Xia et al., 2004; Yelkur & DaCosta, 2001). That a customer could, all things being equal, pay double the price for the same hotel room depending upon whether they called or emailed the hotel should strike many customers as unfair.

At least two studies argue for consistent pricing of rooms, particularly across the hotel's direct channels, as well as for directing online customers to the hotel's website rather than to a third-party website (O'Connor, 2003; Thompson & Failmezger, 2005). Even if customers find a lower price via a third-party website, for example by hotels losing control of their distribution (Caroll &

Table 2
Correlation of Hotel Characteristics and Price Consistency

	Survey 1 (Low Season)		Survey 2 (High Season)	
	Spearman's Rho	Significance (Two-Tailed)	Spearman's Rho	Significance (Two-Tailed)
Rooms	–0.297	$p = \mathbf{0.001}$	+0.227	$p = \mathbf{0.012}$
Stars	–0.134	$p = 0.144$	+0.247	$p = \mathbf{0.006}$
Domain name age	–0.272	$p = \mathbf{0.006}$	+0.005	$p = 0.964$

Siguaw, 2003; Enz, 2003; O'Connor & Piccoli, 2003), some hotels seem to strive for more consistent pricing by guaranteeing the lowest online rate (Rohlfs & Kimes, 2005). Academic suggestions and industry practices appear to be migrating towards consistent pricing for the same room, booked at the same time for the same date.

This study, however, found that about one out of two Swiss hotels offered multiple rates to customers—seemingly for the same room—with the difference in rates sometimes over 200%. These results suggest that Swiss hotels, and most likely non-Swiss hotels, should review the pricing—for the same room for the same dates—across channels that they control. In addition to in-house policies and procedures, hotel management should use a simple mystery shopping survey such as the one in this study to verify what prices customers will receive across different direct and indirect channels.

Still, hotels may want to practice differential pricing or have problems implementing consistent pricing. For the former, hotels should decrease the transaction similarity to help customers grasp the logic behind different prices. Successful transparent pricing by low-cost airlines reflects that customers understand, and appreciate, dynamic pricing. For the latter, based on their review of competitor's prices, pricing across channels, and channel distribution costs, hotels should define and communicate a coherent and transparent pricing policy to all stakeholders. This means, for example, updating the pricing information on the websites and training telephone/email receptionists to market appropriate rates to potential customers.

Management should anticipate customer reactions to price differences and provide appropriate information and explanations for these differences (Rohlfs & Kimes, 2005; Wirtz et al., 2003; Xia et al., 2004). Customers should have access to available pricing options and employees must be able to clarify the product differentiation (Kimes, 2002; Rohlfs & Kimes, 2005). Finally, management should train employees to deal with negative customer reactions to perceived unfair pricing, such as by offering compensation and allowing the customer to vent their frustration (Xia et al., 2004).

Academic Implications

Compared to the traditional telephone channel, the results of this study showed that Swiss hotels' prices were slightly more advantageous for the customers via direct online channels, static website price lists, and email responses. The better distinction may be between synchronous and asynchronous channels. When buyers and sellers can negotiate simultaneously, the seller may report a higher initial price yet be prepared to negotiate downward. With asynchronous channels, however, the seller may report a lower initial price in order to keep the customer.

Similar to other studies in the hospitality industry, this article extends and replicates hotel category and hotel size as significant independent variables related to the adoption of Internet technologies. Unlike early studies that investigated the presence of Internet tools (Schegg et al., 2002; Siguaw et al., 2000; Wei et al., 2001), this study followed a recent trend in adoption research—how hotels use those tools (Gherissi-Labben et al., 2003; Murphy, Olaru et al., 2003; Schegg et al., 2003). This study also added an independent variable related to In-

ternet adoption—domain name age (Scaglione et al., 2004a; Scaglione, Schegg, Steiner, & Murphy, 2004b). These three variables—hotel size, hotel category, and domain name age—related to the implementation of Internet technologies, showing significant correlations with pricing practices in both the high season and low season.

The three variables—category, rooms, and domain name age—related to consistent pricing in the low season, with the latter two showing respective significance levels of 0.001 and 0.006. The larger the hotel and the higher the category, the more likely the hotel had consistent pricing. Yet in the high season, size and category showed significant relationship, 0.012 and 0.006, respectively, with inconsistent pricing.

That domain name age showed a positive relationship with consistent pricing in the low season but no relationship in the high season could reflect a further stage of Internet implementation. The longer a hotel had a domain name (i.e., adopted the Internet), the more likely that hotel had consistent pricing across the channels it controlled in the low season. Unlike the larger and higher rated hotels though, hotels that adopted the Internet earlier showed no significant relationship with inconsistent pricing in the high season.

As shown earlier in this study, hotel size and category showed a significant and positive relationship with domain name age. Yet hotel size and category, but not domain name age, relate to inconsistent pricing in the high season. This counterintuitive result helps support the premise that organizations evolve in their use of technology, from trialing the innovation, to gaps in assimilating the innovation (Fichman, 2000; Fichman & Kemerer, 1999), and finally to using the innovation well (Cooper & Zmud, 1990; Zmud & Apple, 1992). Domain name age, rather than the organizational characteristics, may be a better gauge of evolving website strategies.

In the low season, everything seems as suggested (O'Connor, 2003; Thompson & Failmezger, 2005), with the bigger and higher category hotels leading in the use of consistent pricing. Yet the results in the high season raise several future research questions. Is it good practice to have inconsistent pricing in the high-demand season? Do employees loose their control in the communication of rates in the high season? Are there too many rates, fences, and restrictions during such periods in the larger hotels? Or do these hotels give higher rates on the telephone as they know that they probably do not have to negotiate down in the high season?

Limitations and Future Research

The results of this exploratory study fail to generalize to non-Swiss Hotel Association hotels as well as non-Swiss hotels. Furthermore, Swiss hotels are predominantly SMEs that only change prices annually (Varini et al., 2003). Longitudinal Swiss studies, including non-Swiss Hotel Association hotels and comparison studies in other countries, could clarify if this late 2001 snapshot reflects an aberration or trend. Similarly, future research should examine a common independent variable related to hotel adoption of technology—chain affiliation (Siguaw et al., 2000; Wei et al., 2001).

Hotels may let customers request prices lower than the quoted price (Hanks et al., 2002; O'Connor, 2003), but this study did not ask for lower prices nor for the lowest price. As noted earlier, hotels may tend to price higher in synchronous channels compared to asynchronous channels. Future studies could further standardize the room request and ask for a better price via both channels, as well as add other synchronous channels [e.g., walk-in requests, online chat, and Internet telephony such as Skype (www.skype.com)].

Intermediaries played no role in this study and one could argue that distribution costs were equal for the channels in this study. Regardless of how the customer reserved the room in this study—telephone, email, or web form—a human eventually took the reservation. Still, hotels may have had a rationale for different prices for the seemingly same room. Future research could investigate other distribution routes such as online intermediaries and travel agents, as well as the impact on pricing of their respective distribution costs. Similarly, future research could investigate larger and chain-affiliated hotels' use of dynamic pricing in both direct and indirect channels.

In closing, further research should go beyond descriptive measure of consistent or inconsistent pricing. One such track could draw upon two recent studies that examine consumer behavior, such

as shopping around (Thompson & Failmezger, 2005) and reacting to dynamic pricing (Rohlfs & Kimes, 2005). Another track would investigate how these pricing practices relate to hotel profitability. Related to success measures of customer satisfaction and hotel profitability, research should draw upon organizational diffusion of innovations to further examine successful implementation of hotel pricing across new media such as email, web, chat, Internet telephony, interactive TV, etc.

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Biographical Notes

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